SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT:
 - (A) NAME: YISSUM RES. DEV. CO. OF THE HEBREW UNIV. OF JERUSALEM
 - (B) STREET: 46 Jabotinsky
 - (C) CITY: Jerusalem
 - (E) COUNTRY: ISRAEL
 - (F) POSTAL CODE (ZIP): 91042
 - (G) TELEPHONE: 972-2-5634880
 - (H) TELEFAX: 972-2-5660331
 - (ii) TITLE OF INVENTION: BROAD SPECTRUM PEPTIDE ANTAGONISTS
 - (iii) NUMBER OF SEQUENCES: 12
 - (iv) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk/
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
- (2) INFORMATION FOR SEQ ID NO: 1/2
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 amino acids
 - (B) TYPE: amino aqid
 - (C) STRANDEDNESS; single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Thr Asn Lys Lys Val Thr Ala Gln Glu Leu Asp
1 5 10

- (2) INFORMATION FOR SEQ ID NO: 2:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp 1 5 10

- (2) INFORMATION FOR SEQ ID NO: 3:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Lys Lys Lys Ala Thr Val Gln Glu Leu Asp 1 5 10

- (2) INFORMATION FOR SEQ ID NO: 4:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Lys Lys Lys Val Thr Ala Gln/Glu Leu Asp 1 5 10

- (2) INFORMATION FOR SEQ ID NO : 5
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 13 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE:/peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= X /note= "N-lauryl cysteine residue"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

Xaa Thr Asn Lys Lys Val Thr Ala Gln Glu Leu Asp

1 5 10

- (2) INFORMATION FOR SEQ ID NO: 6:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 13 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

Xaa Tyr Asn Lys Lys Ala Thr Val Gln Glu Leu Asp 1 5 10

- (2) INFORMATION FOR SEQ ID NO: 7:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 24 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

Tyr Asn Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys

1 10 15

Lys Ala Thr Val Gln Glu Leu Asp

- (2) INFORMATION FOR SEQ ID NO: 8:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (xi/) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

Tyr Asn Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys 1 5 10 15

Lys Ala Thr Val Glu Leu Asp Tyr Asn Lys Lys Lys Ala Thr Val 20 25 30

Glu Leu Asp

- (2) INFORMATION FOR SEQ ID NO: 9:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Disulfide-bond
 - (B) LOCATION: 1..14
 - (D) OTHER INFORMATION: /label= X /note= "Disulfide bond formed by the two external Cys residues."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 14
 - (D) OTHER INFORMATION: /labe/= X
 /note= "Extension with a cysteine residue."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION://label= X
 /note= "Extension with a cysteine residue."
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

Xaa Tyr Asn Lys Lys Ala Thr Val Gln Glu Leu Asp Xaa

- (2) INFORMATION FOR SEQ /ID NO: 10:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: Amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

(A) NAME/KEY: Modified-site

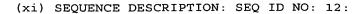
- (B) LOCATION: 1
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 14
 - (D) OTHER INFORMATION: /label= X
 /note= "D-alanine residue"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

Xaa Tyr Asn Lys Lys Lys Ala Thr Val Gln/Glu Leu Asp Xaa 1 5 10/

- (2) INFORMATION FOR SEQ ID NO: 11:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= X /note= "N/acetyl group"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION; 14
 - (D) OTHER INFORMATION: /label= X /note= "D-alanine residue."
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

Xaa Tyr Asn/Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Xaa

- (2) INFORMATION FOR SEQ ID NO: 12:
 - (i) SEQUENCE CHARACTERISTICS:
 - (Á) LENGTH: 239 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
 - (ii/ MOLECULE TYPE: protein
 - (∳i) ORIGINAL SOURCE:
 - (A) ORGANISM: Staphylococcus aureus



Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys 1 5 . 10 15

Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His
20 25 30

Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
35 40 45

Leu Ile Tyr Ser Ile Lys Asp Thr Lys Leu Gly Asn Tyr Asp Asn Val 50 55 60

Arg Val Glu Phe Lys Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys
65 70 75 80

Tyr Val Asp Val Phe Gly Ala Asn Tyr Tyr Tyr Gin Cys Tyr Phe Ser 85 90 95

Lys Lys Thr Asn Asp Ile Asn Ser His Glu Thr Asp Lys Arg Lys Thr
100 105 110

Cys Met Tyr Gly Gly Val Thr Glu His Asn Gly Asn Gln Leu Asp Lys
115 120 125

Tyr Arg Ser Ile Thr Val Arg Val Phe Glu Asp Gly Lys Asn Leu Leu 130 135 140

Ser Phe Asp Val Gln Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu 145 150 155 160

Asp Tyr Leu Thr Arg His fyr Leu Val Lys Asn Lys Lys Leu Tyr Glu
165 170 175

Phe Asn Asn Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn 180 185 190

Glu Asn Ser Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
195 200 205

Asp Gln Ser Vys Tyr Leu Met Met Tyr Asn Asp Asn Lys Met Val Asp 210 220 220

Ser Lys Asp Val Lys Ile Glu Val Tyr Leu Thr Thr Lys Lys Lys 225 230 235